Organizing Files and Folders 9

Organizing your files and folders correctly helps the THINK Project Manager work faster. This chapter tells you how to set up your files and folders, and how to move your files from one folder or machine to another.

Before you begin

Be sure you followed the instructions in Chapter 2, “Installation.” If you didn’t, go back now and check to make sure your disk is set up correctly. This chapter explains why your disk is set up the way that it is.

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9 Organizing Files and Folders

Organizing Your Files

The THINK Project Manager works with many files at the same time. Most programs have several source files and libraries, and the THINK Project Manager needs to be able to keep track of where these files are on your disk. At the same time, you have to be able to organize the files in your project in a logical way.

A full pathname describes exactly where on a disk a file is. For example, the name `Hard Disk:Folder 1:Folder 2:MyFile.c` *says the file* `MyFile.c` *is in the folder called* `Folder 2`*, which is in* `Folder 1` *on the disk called Hard Disk.*

Instead of using full pathnames to keep track of where a file is, the THINK Project Manager looks for your files either within the folder that contains the THINK Project Manager application or within the folder that your project is in.

The THINK Project Manager treats all files in all folders within the THINK Project Manager folder as if they were in the same flat folder. The folder that contains the THINK Project Manager and all the subfolders in it are called the THINK Tree.

The THINK Project Manager treats all the files in your project folder as if they were all in the same folder. The folder and subfolders your project is in are called the project tree.

This organization lets you move files in and out of folders and even rename folders without having to let the THINK Project Manager know exactly where the files are. The THINK Project Manager notes which tree a file belongs to when you add it to your project. If you move files later on, the THINK Project Manager looks in the appropriate tree to find it.

The THINK Project Manager finds your files more quickly if you follow these guidelines:

- Keep all your libraries in the THINK Tree.
- Keep all your source files and other project-specific files in the project tree.

There are a few points you should remember about using the THINK and project trees.

Don’t put project folders in the THINK Tree

For example, you cannot put project folders in the folder that contains the THINK Project Manager. Instead, put the folder that contains the THINK Project Manager and your project folders inside another folder called, for example, `Development`. Or let them be top-level folders on your hard disk.

Nesting folders is the most common mistake. It seems natural to put all your THINK Project Manager files in one folder and then toss your project folders in there as well. If you set up your disk like this, the THINK Project Manager will search all your other project trees every time it searches the THINK Tree. Setting up your project folders this way not only increases search times, it also makes it more likely that you'll duplicate names within trees.

Avoid duplicate file names in trees

Just as you can't have two files with the same name in the same folder, you shouldn't have duplicate file names in different folders within the project or THINK Tree. If you do, the THINK Project Manager won't know which file to use. Duplicate file names won't lead to any explicit errors, but you may end up using the wrong file. It's OK to have the same file name in both the project and THINK Trees. The THINK Project Manager resolves the conflict deterministically by search order.

Warning

The **Save As** command copies files, so if you use it to save a copy in another folder, be sure to remove or rename the original file. See "Moving Files on Disk" below.

Don't move the THINK Project Manager application

The THINK Project Manager application must remain where it is installed, or it won't be able to locate its translators and libraries. If you are running System 7, however, you can create an alias of the THINK Project Manager and place it anywhere you want.

Moving Files on Disk

You can move files freely within a tree. If the THINK Project Manager can't find a file that's already in your project, it assumes that you've just moved it somewhere within the tree, and tries to find it there.

Moving a source file

To move a file from one tree to the other tree, it's best to use the **Save As** command in the **File** menu. This command takes care of updating the references to the file in your project document without losing the object code, so you won't have to recompile it.

This is how you move a file from one tree to the other:

1. Open the file you want to move. Double-clicking its name in the project window is the fastest way to do this.

2. Choose **Save As** from the **File** menu. When the standard file dialog box appears, go to the folder within the tree where you want to save the file, and click Save.

3. Make sure you delete the file from the original tree. Because **Save As** makes a copy, the original file remains in the old tree.

Moving a library

Moving a library is a more complicated, because you can't open libraries with the editor.

1. Move the library to a folder in the other tree. Use the Finder or a file-moving desk accessory.

2. Choose **Remove** from the **Project** menu to remove references to the library from the project.

3. Use the **Add** command in the **Source** menu to put it back into the project.

Moving other files

From time to time your project may refer to files and libraries outside the THINK or project trees. To move these files, use the same procedure as for libraries above.

Moving files to another machine

When you move a project to another Macintosh, use the Use Disk button in the **Make** dialog to let the THINK Project Manager find all the files. Files don't need to be in exactly the same place on the two machines as long as they're within the project or THINK Trees. Files outside either tree must have the same absolute pathname on the two machines.

A note about search times

Searching the trees after you've moved files around can take a little time. Once the THINK Project Manager finds a file, though, it remembers where it is and looks there first the next time. So if the compiler seems slower than usual, don't worry. Once the THINK Project Manager learns where your files are, it speeds up again.

Managing Files

When you work with a small project, managing your files is easy. You put them all in the same folder. This section explains some strategies to use as your projects become more complex.

Using shielded folders and project-specific folders

To shield a folder from either search tree, enclose its name in parentheses. (For example, you might have a folder in the project folder named `(Backups)`.) The THINK Project Manager ignores all files and subfolders in shielded folders. You can use shielded folders to store old versions of source or header files, or to keep the THINK Project Manager from wasting time looking in folders that contain other kinds of documents, such as development notes.

There is one exception to the shielding rule. If the folder your project is in contains a folder with exactly the same name as your project, surrounded by parentheses, the THINK Project Manager *will* search that folder.

You can use this feature if you're working on two projects that share files. For instance, suppose you're working on two projects, `INITProject` and `cdevProject`, that share some source files and are in the same folder. You create two folders, `(INITProject)` and `(cdevProject)`, that both contain versions of the header file `config.h` tailored to control conditional compilation of the common source files.

Using aliases

By putting an alias to a folder in your THINK Tree or project tree, you can "graft" a branch on from another tree. To put a folder alias in a tree, create a folder named `Aliases` in the top level of the tree and put your aliases in that folder.

Note

If you installed the THINK Project Manager according to the instructions in "Installation," Chapter 2, there is an `Aliases` folder in the THINK Tree.

For example, if two projects share some files, you can put those common files in a folder and put an alias to that folder in each project tree, as shown in Figure 9-1. Be sure to create a folder named

`Aliases` at the top level of each project folder and place the alias there.

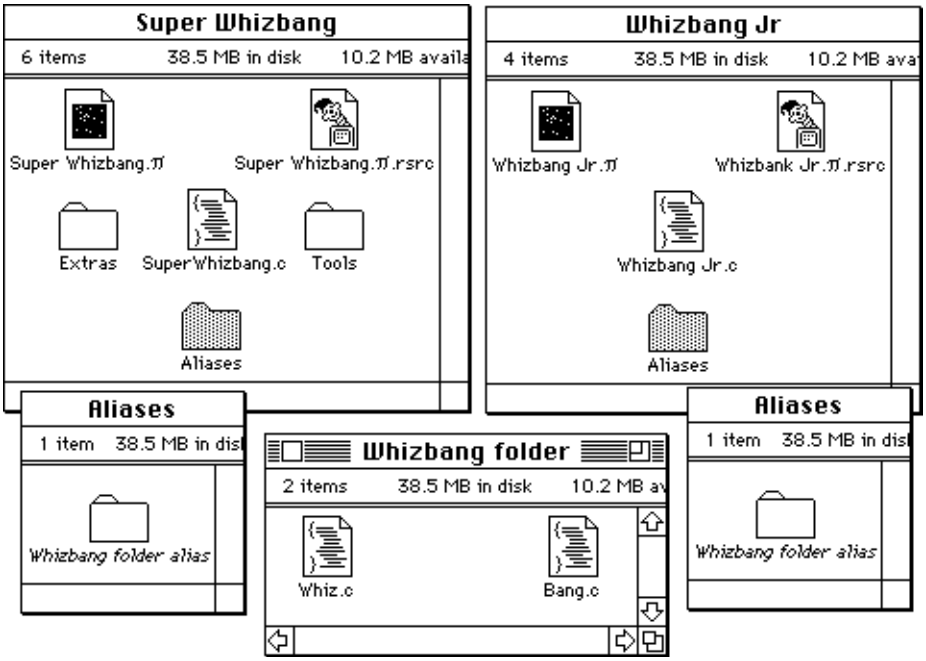

Figure 9-1 Using aliases in a project tree

If several projects use the same files, you can put an alias to the folder that contains them in the `Aliases` folder, which is in the folder that contains the THINK Project Manager.

If you select an alias in the **Add Files** dialog, the THINK Project Manager resolves the alias and adds the actual file to your project. For example, if `Util.c` is an alias to `MyUtils.c`, and you select `Util.c`, the THINK Project Manager resolves the alias and adds `MyUtils.c` to your project. If you later change `Util.c` to be an alias to `JeanUtils.c`, your project still contains `MyUtils.c`.

Placing files into folders

When you're working on a small program, it makes sense to keep all source files and header files in the same folder, as shown in Figure 9-2.

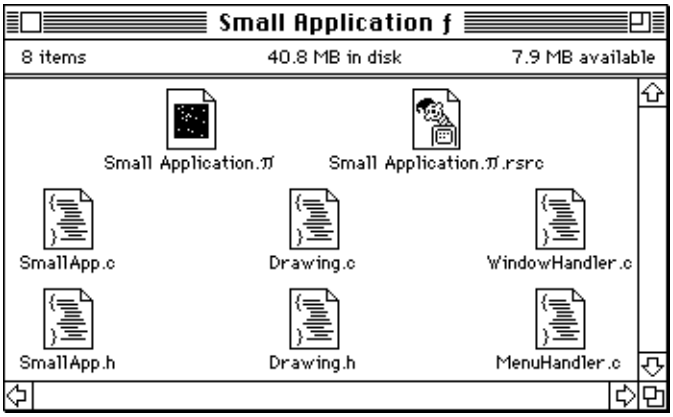

Figure 9-2 Organizing files for a small application

In the project in Figure 9-2, the THINK Project Manager looks for all the project files in the folder called `Small Application ƒ`.

As your application grows, you might want to distribute your source and header files among several folders.

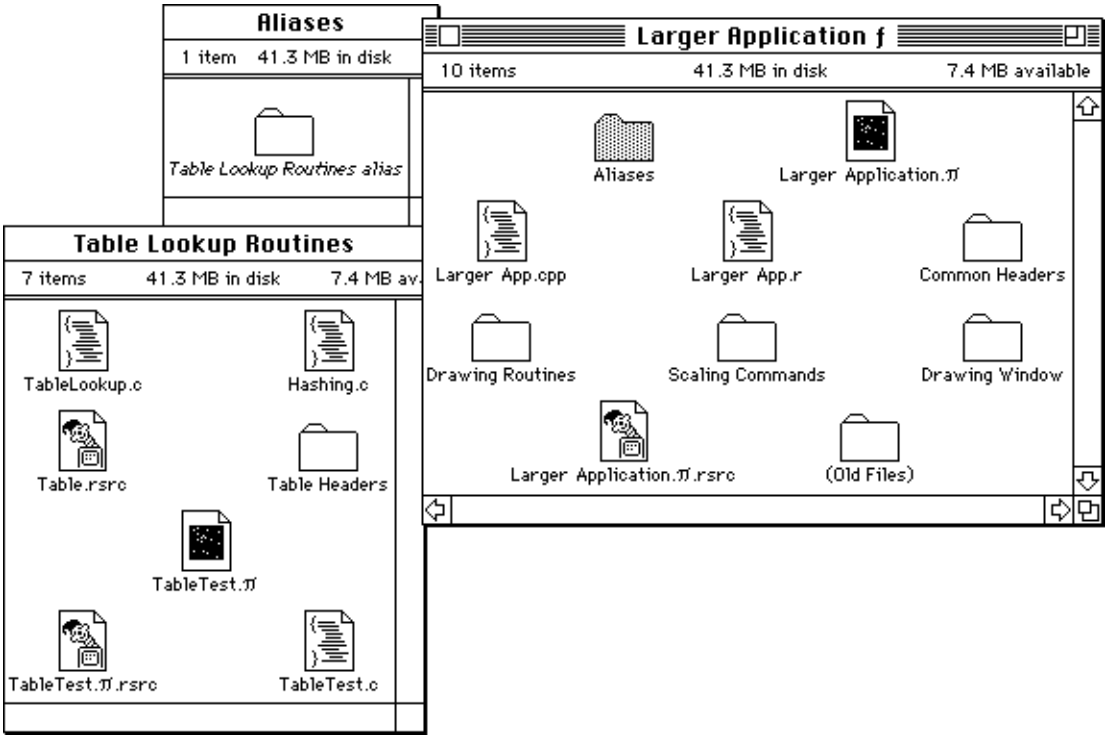

Figure 9-3 Organizing files for a larger application

In Figure 9-3, most of the source and header files are in folders. Since the THINK Project Manager treats all the files and folders within the `Larger Application ƒ` folder as if they were in the same folder, you can put your header files where they make the most sense. The folder (`Old Files`) is a shielded folder, so the THINK Project Manager will never look there for source or header files. You can use shielded folders in this way, to store old versions of files.

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